Amendment Docket No. NL030872US

Serial No. 10/563, 842

IN THE CLAIMS:

Kindly replace the claims of record with the following full set of claims:

1. (Currently amended): A pair of sunglasses comprising at least one electro-wetting

lens incorporating first and second immiscible fluids of dissimilar light transmission

properties, the first fluid being a better light transmitter than the second fluid, wherein

variation in [[the]] a potential difference between first and second electrodes of each

electro-wetting lens causes the shape of a boundary between the first and second

fluids to alter from a first state in which the second fluid forms a layer across

substantially an entire light transmitting area of an internal surface of the lens and

light transmission is at a most reduced state to a second state in which light

transmission is at a maximum, wherein one of said first and second electrodes is

divided into a plurality of individually addressable lines sections to which said

potential difference is sequentially applied.

2. (original): The sunglasses of claim 1 wherein in the second state the second fluid

is confined to peripheral regions of the lens.

3. (Previously presented): The sunglasses of claim 1, wherein the lens comprises a

transparent rear wall and a transparent front wall defining a cavity between them,

within which the first and second fluids are confined.

4. (Previously presented): The sunglasses of claim 3, wherein the first and second

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electrodes of the lens comprise a rear electrode formed in a region of the internal

surface of the rear wall and a ring-electrode which extends around an internal

periphery of the front wall.

5. (Previously presented): The sunglasses of claim 4, wherein an interior region of

the front wall is hydrophobic or coated with a hydrophobic layer whilst the ring-type

electrode is hydrophobically insulated.

6. (previously presented): The sunglasses of claim 1, wherein the natural state of the

lens is the first state, and in this first state no potential difference is applied between

electrodes of the lenses.

7. (original): The sunglasses of claim 6, wherein the first fluid is the fluid nearest the

front wall, whilst the second fluid is the fluid having a boundary nearest the rear wall.

8. (previously presented): The sunglasses of claim 6, wherein the first fluid is a

transparent non-conducting fluid, whilst the second fluid is a colored conductive

and/or polar fluid.

9. (previously presented): The sunglasses of claim 1, wherein the natural state of the

lens is the second state and in this state no potential difference is applied between

electrodes of the lens.

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10. (original): The sunglasses of claim 9, wherein the first fluid is the fluid nearest

the rear wall, whilst the second fluid is the fluid having a boundary nearest the front

wall

11. (original): The sunglasses of claim 10, wherein the first fluid is a transparent

polar and/or conductive fluid, whilst the second fluid is a colored non-conductive

fluid.

12. (previously presented): The sunglasses of claim 10, wherein the thickness of the

second fluid within an optical path area of the lens may be continuously varied by

varying the potential difference between electrodes.

13. (previously presented): The sunglasses of claim 1, wherein progressive variation

of the potential difference between the electrodes is arranged to progressively alter

the shape of the boundary to provide a progressive alteration between the first and

second states.

14. (Previously presented): The sunglasses of claim 1, wherein a hydrophobic

insulator is formed on an interior region of the rear wall and also on a transparent rear

electrode

15. (Previously presented): The sunglasses of claim 14, wherein the first fluid is the

fluid which, in the first state, has a boundary nearest the front wall, whilst the second

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fluid is the fluid having a boundary nearest the rear wall.

16. (original): The sunglasses of claim 15, wherein the first fluid is a transparent

polar and/or conductive fluid, and the second fluid is a colored non-conductive fluid.

17. (original): The sunglasses of claim 16, wherein the application of a potential

difference between the electrodes causes the second fluid to be pushed toward side

regions of the lens.

18. (Previously presented): The sunglasses of claim 1, wherein the curvature of the

front wall, the curvature of the rear wall and the refractive index of the first and

second fluids are arranged so as to correct a visual defect of a wearer.

19. (previously presented): The sunglasses of claim 1, wherein manual adjustment

means are provided for altering the potential difference applied between the pairs of

first and second electrodes.

20. (previously presented): The sunglasses of claim 1, wherein automatic adjustment

means are provided for altering the potential difference applied between first and

second pairs of electrodes.

21. (previously presented): The sunglasses of claim 1, wherein the first and second

fluids are of substantially the same refractive index and specific gravity.

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22. (Currently amended): Electro-wetting lens incorporating first and second immiscible fluids of dissimilar light transmission properties, the first fluid being a better light transmitter than the second fluid, wherein variation in [[the]] a potential difference between a first electrode and a second electrode electrodes of each electrowetting lens causes [[the]] a shape of a boundary between the first and second fluids to alter from a first state in which the second fluid forms a layer across substantially an entire light transmitting area of an internal surface of the lens and light transmission is at a most reduced state to a second state in which light transmission is at a maximum, wherein one of said first and second electrodes is divided into a plurality of individually addressable lines sections to which said potential difference is sequentially applied.